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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,824	10/01/2003	Yoshihiro Nakata	P68040US1	8769
136	7590	11/29/2006		
JACOBSON HOLMAN PLLC 400 SEVENTH STREET N.W. SUITE 600 WASHINGTON, DC 20004				
			EXAMINER SERGENT, RABON A	
			ART UNIT 1711	PAPER NUMBER

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/674,824

Applicant(s)

NAKATA ET AL.

Examiner

Rabon Sergeant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 5 and 6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5, and 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11-263962 or Araki et al. ('300), each in view of Seiter ('722), Emmerling et al. ('623), and Samurkas et al. ('303).

The primary references disclose moisture curable one component polyurethane adhesives comprising a urethane prepolymer, wherein the prepolymer is derived from the reaction of a stoichiometric excess of polyisocyanate with a polyol, corresponding to applicants' claimed polyols, a silane coupling agent, applicants' claimed morpholino catalysts, and a dibutyltin dicarboxylate catalyst that satisfies applicants' claimed tin catalyst. See pages 1-6, especially paragraphs [0027], [0042], and [0051] of the machine translation of JP 11-263962. See abstract; columns 5-8; column 13, lines 33-38; and column 14, lines 36-39, within Araki et al. With respect to the index ratio used to produce the prepolymer, it is noted that a NCO/OH ratio of

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1.5:1 to 8:1 is disclosed within paragraph [0030] of the translation of JP 11-263962 and a preferred NCO/OH ratio of 1.5:1 to 2.4:1 is disclosed at column 6, line 14 of Araki et al.

Furthermore, it is noted that each of the primary references discloses relative amounts of prepolymer used within the adhesive that meet applicants' claimed amount. This position is supported by the Example disclosed within paragraphs [0063] and [0064] of the translation of JP 11-263962 and the Examples of Araki et al. Additionally, the primary references are considered to disclose amounts of catalysts that at the least render obvious applicants' claimed amounts. See paragraphs [0041] and [0042] within the translation of JP 11-263962 and the abstract and column 4, lines 19-51 within Araki et al.

3. However, the references are silent regarding applicants' claimed polyisocyanate derived silane coupling agent, the use of hexamethylene diisocyanate derivatives, corresponding to applicants' component b), and the silane coupling agent of claim 5. Still, the position is taken that these components in the claimed amounts were known components (adhesion promoters) for moisture curable polyurethane compositions, suitable for such applications as the production of glass adhesives and sealants, at the time of invention. See column 2 within Seiter. See column 2 and examples within Emmerling et al. See column 6, lines 24-56, especially lines 31, 32, and 41-43, within Samurkas et al. Therefore, since it has been held that it is *prima facie* obvious to utilize a known component for its known function, the position is taken that it would have been obvious to incorporate these known moisture curable adhesive components within the compositions of the primary references. *In re Linder*, 173 USPQ 356. *In re Dial et al.*, 140 USPQ 244. Furthermore, it has been held that it is *prima facie* obvious to combine two compositions, each of which is taught by the prior art to be useful for the same purpose, in order

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to form a third composition to be used for the very same purpose. Accordingly, it would have been obvious to utilize mixtures of the disclosed adhesion promoters. *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980); *In re Crockett*, 279 F.2d 274, 126 USPQ 186 (CCPA 1960). In addition to the aforementioned teachings, the teachings of Samurkas et al. at column 6, lines 49-56 are considered to further disclose or at least render obvious applicants' claimed quantities of the adhesion promoters, corresponding to applicants' components (b) and (c). The position is taken that applicants' filing date is October 1, 2003 for compositions employing tin catalysts other than dibutyltin diacetylacetonate and compositions employing the claimed polyisocyanate derived silane coupling agents.

4. The examiner has considered applicants' response; however, the prior art rejection has been maintained for the following reasons. Despite applicants' remarks, the position is maintained that adequate motivation has been provided to combine the teachings of the primary and secondary references. The position is maintained that it is *prima facie* obvious to utilize a known compound for its known function and that it is *prima facie* obvious to combine components known to have the same utility. Accordingly, it would have been obvious to utilize mixtures of known adhesion promoters within the adhesive compositions of the primary references. Like the primary references, the secondary references are drawn to moisture curable polyurethane compositions; therefore, the compositions of the primary and secondary references are analogous. Furthermore, the compositions of the secondary references are disclosed as being adhesives and sealants for such substrates as glass; therefore, one seeking to improve the adhesion of polyurethane to such substrates would have been motivated to employ the adhesion promoters of the secondary references within the composition of the primary references.

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Additionally, despite applicants' arguments, the position is maintained in view of the aforementioned cites that the combined teachings of the references are adequate to disclose the claimed amounts or at the least render them *prima facie* obvious. Therefore, contrary to applicants' assertions within page 6 of the response, the examiner has addressed how and why the prior art discloses or renders obvious the particular prepolymer (a), the particular amount of the prepolymer (a), the particular hexamethylene diisocyanate derivative (b), and the particular amount of the hexamethylene diisocyanate derivative (b). In summation, despite applicants' arguments, the position is maintained that the examiner has set forth a proper *prima facie* case of obviousness, and the position is further taken that applicants have neither established why it would not have been obvious to combine the teachings of the references as set forth nor adequately rebutted the *prima facie* case of obviousness by such means as a showing of unexpected results.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

R. Sergent
November 27, 2006


RABON SERGENT
PRIMARY EXAMINER